

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) Pressure sensor with an integrated structure comprising:

a silicon die, having an upper surface including at least an upper edge[[],] and an inner face, and an outer surface on which piezoresistors are mounted comprised, wherein at least the inner face of the die is in contact with a fluid the pressure of which is to be measured;

a support having an upper surface, a thickness, and a recessed seat in the thickness, the recessed seat adapted to receive the entire die, wherein the recessed seat and the die have the same profile; and

a container supporting including the support; the die in contact with a fluid the pressure of which is to be measured;

wherein said die is mounted within integrated into the recessed seat in the thickness of the support.

2. (Previously Presented) Pressure sensor with integrated structure according to claim 1 wherein the support further comprises a lower surface, and the recessed seat passes through the support from the upper surface to the lower surface.

3. (Previously Presented) Pressure sensor with integrated structure according to claim 1, further comprising a step on the inner surface of the container, the step enabling improved gluing of the support.

Applicant: Paolo Bellini et al.  
Appl. No.: 10/559,936

4. (Previously Presented) Pressure sensor with integrated structure according to claim 1:  
wherein the upper edge of the die is substantially coplanar with the upper surface of the support.
5. (Cancelled)
6. (Previously Presented) Pressure sensor with integrated structure according to claim 1:  
wherein on the inner face of the die, in contact with the fluid the pressure of which is to be measured, is a layer of protection made from at least one of chromium, tantalum, silicon, or carbide alloys.
7. (Previously Presented) Pressure sensor with integrated structure according to claim 1:  
further comprising a step on the inside of the seat, running along an edge of the seat, in the vicinity of the upper surface of the support.
8. (Previously Presented) Pressure sensor with integrated structure according to claim 7 wherein the upper edge of the die is in abutment with the step.
9. (Previously Presented) Pressure sensor with integrated structure according to claim 8:  
wherein the surface of the part of the step, that is in contact with the upper edge of the die, is less than the surface of the upper edge itself.

10. (Previously Presented) Pressure sensor with integrated structure according to claim 1:  
further comprising a step on the inside of the seat, running along an edge of the seat, in  
the vicinity of the lower surface of the support.
11. (Previously Presented) Pressure sensor with integrated structure according to claim 10:  
wherein the upper edge of the die is substantially coplanar with the upper surface of the  
support.
12. (Previously Presented) Pressure sensor with integrated structure according to claim 10:  
wherein the outer face of the die is in abutment with the step.
13. (Cancelled)
14. (Previously Presented) Pressure sensor with an integrated structure according to claim 1,  
wherein the support further comprises a lower surface, and wherein the pressure sensor further  
comprises an electronic circuit built on the lower surface of the support, said electronic circuit being  
connected through bonding wires to the piezoresistors on the outer face of the die.
15. (Previously Presented) Pressure sensor with an integrated structure according to claim 1,  
wherein the support further comprises a lower surface, and wherein the pressure sensor further

Applicant: Paolo Bellini et al.  
Appl. No.: 10/559,936

comprises a silicone resin layer coated on the lower surface of the support, said layer being capable of following deformations of the die.

16. (Previously Presented) Pressure sensor with an integrated structure according to claim 1, further comprising a container being suitable for putting the die in contact with the fluid the pressure of which is to be measured.